



## EXHIBIT A

### A MARKED UP VERSION OF THE PARAGRAPHS IN THE SPECIFICATION AMENDED DECEMBER 20, 2001

(Additions are double underlined, deletions are indicated by strike-through)

IN U.S. APPLICATION SERIAL NO. 09/813,214  
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On page 61, please amend the paragraph beginning on line 32 as follows:

The kit oligonucleotide P1(TCATCATTGGAAAACGTTCTTCGGGGCGAA) (SEQ ID NO: 20) hybridizes approximately 1 kb away from the multiple cloning site of p *omp* N/P. The size of a PCR product obtained with the oligonucleotides P1 and MC 17 (SEQ ID NO:16) was approximately 1.5 kb. It was hence deduced that the 72 bp fragment maps at approximately 450 bp upstream from the PstI site. It was also evident from this information that the major part of the OMP106 protein was encoded by sequences located beyond the PstI site. By the same token, there was ample sequence upstream from the 72 bp region to encode a presumptive signal sequence and promoter/regulatory elements to drive transcription of this gene in *Moraxella catarrhalis*.

On page 63, please amend the paragraph beginning on line 25 as follows:

Finally, the missing sequences between the PstI site and the EcoRI were generated by long distance PCR (Barnes, W.M., 1994, Proc. Natl. Acad. Sci. USA 91:2216-2220) using genomic DNA or phageλ *omp*106.6 DNA as the template. The primers for this experiment were MC 17 (SEQ ID NO:16) and a gene-specific primer, *omp* R/X a1 (CGG TCA GCT TAG GCG TGG TT) (SEQ ID NO: 21) which was designed based on sequence information downstream from the EcoRI site in pBK *omp* R/X. The PCR product having an approximate size of 3.5 kb was digested with PstI and EcoRI and the approximately 3 kb fragment was gel-isolated and cloned into PstI/EcoRI digested pBluescript II SK. The resulting recombinant plasmid was designated as p *omp* P/R. A map of the *omp*106 locus, including fragments subcloned and used in various constructs, is shown in Figure 11. Construction of the plasmids illustrated in Figure 11 is described herein below in Section 9.